

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matters of)	
)	
Deployment of Wireline Services Offering)	CC Docket No. 98-147
Advanced Telecommunications Capability)	
)	
and)	
)	
Implementation of the Local Competition)	CC Docket No. 96-98
Provisions of the Telecommunications Act)	
of 1996)	

COMMENTS OF NORTHPOINT COMMUNICATIONS, INC.

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Table of Contents

<u>Table of Contents</u>	i
<u>Summary</u>	iii
I. INTRODUCTION	1
II. INCUMBENT LECS MUST PERMIT PHYSICAL COLLOCATION OF DSLAMS AND CERTAIN ATM EQUIPMENT NECESSARY FOR INTERCONNECTION AND ACCESS TO UNES	3
A. Equipment is “Necessary” if it is Directly Related to Interconnection or Access to Unbundled Network Elements.	3
B. DSLAMs are “Necessary” for Access to UNES.	5
C. Certain ATM Equipment is “Necessary” for Access to UNES.....	6
III. INCUMBENT LECS MUST ALLOW CARRIERS TO ESTABLISH CROSS-CONNECTS BETWEEN COLLOCATED EQUIPMENT	8
A. The D.C. Circuit’s Opinion Did Not Disturb The Commission’s 1996 Rule Requiring Incumbent LECs To Provide Cross-Connects Between The Equipment Of Collocated Carriers.....	8
B. Cross-Connects Between Collocated Equipment are Part of the Terms and Conditions of Collocation, and must be Provided in a Manner that is Just, Reasonable and Nondiscriminatory.....	10
1. It would be unjust, unreasonable and discriminatory to deny carriers the right to cross-connect their collocated equipment.	11
2. It would be unjust and unreasonable to deny competitive LECs the right to provide their own cross-connects.	13
C. The Commission Should Declare Cross-Connects Between Collocated Equipment to be Network Elements that must be Unbundled.....	14
1. Cross-connects are network elements.	15
2. Cross-connects must be offered on an unbundled basis at cost-based rates.	16

IV. INCUMBENT LECS MUST OFFER TO COLLOCATE EQUIPMENT IN THE MOST SUITABLE SPACE AVAILABLE WITHIN THE INCUMBENT LEC’S PREMISES WITHIN REASONABLE PROVISIONING INTERVALS.....	18
A. Safeguards Are Necessary To Ensure That Incumbent LECS Assign Space In A Just, Reasonable, And Nondiscriminatory Manner.....	19
B. Competitive LECS Should Not Bear the Burden of an Incumbent LEC’s Choice to Isolate Competitive LEC Collocation Arrangements or to Require Competitive LECS to Use Separate Entrances.....	21
C. The Commission Should Establish Reasonable Provisioning Intervals for Cageless Collocation and Augments.	22
D. The Commission Should Adopt A National Space Reservation Policy.....	23
V. INCUMBENT LECS MUST DEPLOY REMOTE “NEXT GENERATION” NETWORKS IN A PRO-COMPETITIVE MANNER	24
A. Incumbent LECS Must Retain and Maintain Existing Copper Plant.	25
B. Competitors Must Be Permitted To Collocate At Remote Terminals.....	27
C. Incumbent LECS Must Provide Access to all the Features, Functions, and Capabilities of Their Advanced Services Equipment.	28
VI. CONCLUSION.....	31

Summary

The Commission has recognized consistently that effective collocation rules are vital to the continued deployment of advanced services and the emergence of facilities-based competition among providers of those services. Collocation rules must provide competitive LECs the access to incumbent LEC central offices that they need to obtain access to loops and other unbundled network elements. NorthPoint urges the Commission to continue its strong support for collocation by adopting rules addressing four collocation fundamentals that providers of DSL advanced services need to offer their services competitively.

First, the Commission should require that incumbent LECs permit collocation of equipment, including digital subscriber line access multiplexers and certain asynchronous transfer mode aggregation devices, necessary for access to unbundled network elements. The Commission should adopt the definition of “necessary” suggested by the U.S. Court of Appeals for the D.C. Circuit: equipment that is “directly related to” interconnection or access to unbundled network elements.

Second, the Commission should require that incumbent LECs allow competitors to construct or purchase cross-connects to interconnect a collocater’s equipment with other equipment used by the collocater or by another carrier. Cross connects are among the “terms and conditions” of collocation that the incumbent LECs must offer on a just, reasonable, and nondiscriminatory basis. Moreover, the Commission should conclude that cross connects are network elements that incumbents must unbundle pursuant to section 251(c)(3).

Third, the Commission must adopt safeguards to ensure that incumbents permit collocation of equipment in the most suitable space available within the incumbent LEC’s premises, subject to reasonable provisioning intervals. These requirements are necessary to

ensure that incumbents make central office space available in a just, reasonable, and nondiscriminatory manner.

Fourth, the Commission must adopt rules to ensure that incumbent LECs provide competitors with adequate collocation space, as well as continued access to copper loops and access to all the functionalities needed to provide advanced services over “next generation” networks. These rules would protect the long-term future of facilities-based competition by ensuring that the deployment of new network architectures by incumbent LECs does not compromise new entrants’ ability to gain access to the network elements they need to compete.

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COMMENTS OF NORTHPOINT COMMUNICATIONS, INC.

NorthPoint Communications, Inc. (“NorthPoint”) submits these comments in response to the Notice of Proposed Rulemaking released on August 10, 2000 in the above-captioned proceeding.¹

I. INTRODUCTION

NorthPoint is a national, facilities-based competitive local exchange carrier (“LEC”), certified to provide service in 40 states and the District of Columbia, and dedicated to providing affordable, high-speed Internet access over existing telephone lines using digital subscriber line (“DSL”) technology.² The ability of NorthPoint and other competitive LECs to deploy advanced

¹ *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Order on Reconsideration and Second Further Notice of Proposed Rulemaking in Docket No. 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98 (rel. Aug. 10, 2000) (“*NPRM*”).

² NorthPoint plans to offer DSL service in 61 major metropolitan areas by the end of 2000. NorthPoint provides DSL-based Internet access service -- at speeds up to 1.5 Mbps, more than 25 times faster than common dial-up modems -- on a wholesale basis. NorthPoint has entered into an agreement with Verizon Communications (“Verizon”) in which the two companies will combine their DSL businesses into a new corporation offering a broader range of services, across a broader geographic footprint than either company currently provides on its own. As part of the transaction, the new NorthPoint would become a “most separate” affiliate of Verizon, with

services over their own equipment is a critical part of achieving several key goals of the Telecommunications Act of 1996 (“The Act”), including: the deployment of advanced telecommunications capability to all Americans, the development of facilities-based competition, and the creation of incentives for innovation and investment in the telecommunications marketplace.³

Effective collocation rules are vital to the continued deployment of advanced services and emergence of facilities-based competition among providers of those services. These rules must provide competitive LECs the access to incumbent LEC central offices that they need to obtain access to unbundled loops and other network elements. In addition these rules must protect the long-term future of facilities-based competition by ensuring that the deployment of new network architectures by incumbent LECs does not compromise new entrants’ ability to gain access to the network elements they need to compete. For these reasons, NorthPoint urges the Commission to adopt rules addressing four collocation fundamentals that providers of DSL advanced services need to offer their services competitively:

substantial independent ownership, a board that includes independent directors and a management team led by current NorthPoint personnel. *See Joint Application of NorthPoint Communications, Inc. and Verizon Communications for Authority Pursuant to Section 214 of the Communications Act, as Amended, To Transfer Control of Blanket Authorization To Provide Domestic Interstate Telecommunications Services as a Non-Dominant Carrier*, CC Docket No. 00-157, Application for Transfer of Control (Aug. 25, 2000).

³ 47 U.S.C. § 157(a); *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98, 15 FCC Rcd 3696, 3746 (1999) (“*UNE Remand Order*”)(¶¶ 103-104) (stating that “[t]wo fundamental goals of the [1996] Act are to open the local exchange and exchange access markets to competition and to promote innovation and investment by all participants in the telecommunications marketplace” and noting that “it is the development of facilities-based competition that will provide both incumbent and competitive LECs with the incentives to innovate and invest in new technologies.”); *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 4761, 4762-63 (1999) (“*Collocation Order*”)(¶¶ 1-4), *aff’d in part and remanded in part sub nom., GTE Service Corp. v. FCC*, 205 F.3d 416 (D.C. Cir. 2000) (“*GTE*”).

- Collocation of equipment, including digital subscriber line access multiplexers (“DSLAMs”) and certain asynchronous transfer mode (“ATM”) aggregation devices, necessary for interconnection or access to unbundled network elements;
- cross-connects to interconnect a collocater’s equipment with itself or another carrier;
- collocation of equipment in the most suitable space available within the incumbent LEC’s premises, and subject to reasonable provisioning intervals; and
- access to facilities and equipment needed to provide advanced services over “next generation” networks.

As explained below, these actions are compelled as a matter of sound telecommunications policy and are fully consistent with the Telecommunications Act of 1996.

II. INCUMBENT LECS MUST PERMIT PHYSICAL COLLOCATION OF DSLAMS AND CERTAIN ATM EQUIPMENT NECESSARY FOR INTERCONNECTION AND ACCESS TO UNES

A. Equipment is “Necessary” if it is Directly Related to Interconnection or Access to Unbundled Network Elements.

Section 251(c)(6) of the Telecommunications Act of 1996 imposes on incumbent LECs the duty to provide for “physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier” The Commission originally interpreted this section to require incumbent LECs to permit collocation of equipment that is “used or useful” for either interconnection or access to unbundled network elements.⁴

The D.C. Circuit, however, held in the *GTE* case that the Commission’s interpretation of the term “necessary” was “impermissibly broad” because it required incumbent LECs to provide collocation space for “any and all equipment that is otherwise necessary without regard to whether such equipment *unnecessarily* ‘includes a switching functionality, provides enhanced

⁴ *Collocation Order*, 14 FCC Rcd at 4776-77, ¶ 20.

service capabilities, or offers other functionalities.”⁵ The court vacated those sections of the Commission’s order that went beyond requiring incumbent LECs to provide collocation of equipment that is “directly related to and thus necessary, required, or indispensable to” interconnection or access to UNEs.⁶ The court remanded the case to the Commission for further consideration of its definition of “necessary,” explaining that the Commission needed to provide a “better explanation” of the equipment it requires incumbent LECs to collocate. Following the court’s direction, the Commission should define as “necessary” any equipment that is directly related to interconnection or access to unbundled network elements.

For NorthPoint to obtain access to incumbent LEC-provided UNEs, it must be allowed physically to collocate equipment, such as DSLAMs and ATM aggregation devices, capable of performing at least two basic functions:

1. Termination of cross-connects from an incumbent LEC’s splitter or main distribution frame (“MDF”) where unbundled loops are terminated; and
2. Aggregation of traffic for transport to NorthPoint’s node or an Internet Service Provider’s (“ISP’s”) Point of Presence (“PoP”) using an efficient transport architecture.

Because these functions are directly related to NorthPoint’s access to the unbundled network elements (principally loops and interoffice transport) that it purchases from the incumbent LECs, equipment providing these functions clearly meets the court’s definition of “necessary.”

In the NPRM, the Commission also sought comment on a definition of “necessary” analogous to the definition adopted in the *UNE Remand Order*.⁷ In the *UNE Remand Order*, the Commission concluded that a network element is “necessary” within the meaning of section 251(d)(2) if denial of access to that element “would, as a practical, economic, and operational

⁵ See *GTE* 205 F.3d at 420.

⁶ *Id.* at 424.

⁷ *NPRM* at ¶ 75, citing *UNE Remand Order*, 15 FCC Rcd at 3721, ¶ 44.

matter, *preclude* a requesting carrier from providing the services it seeks to offer.”⁸ Although in NorthPoint’s view, adoption of an analogous definition in the context of Section 251(c)(6) is neither legally compelled nor desirable, NorthPoint demonstrates below that both DSLAMs and ATM aggregation devices are “necessary” under either the court’s definition (“directly related to”) or a definition analogous to the *UNE Remand* standard.

1. DSLAMs are “Necessary” for Access to UNEs.

As the Commission explained in the *NPRM*, DSL carriers providing service over unbundled loops “must have the ability to collocate DSLAMs at the incumbent LEC’s premises . . . where the customer’s unbundled loop or subloop terminates.”⁹ Otherwise, customers “will not have a choice of LECs from which to purchase advanced services.”¹⁰ DSLAMs provide DSL carriers with access to the individual copper loops the carrier purchases from the incumbent LEC as UNEs, and aggregate the traffic from these loops for efficient use of interoffice transport.¹¹ For example, NorthPoint uses DSLAMs to terminate traffic from up to 190 individual DS0 lines (*i.e.*, cross-connects from the incumbent LEC’s splitter or MDF carrying traffic from incumbent LEC-provided loops) and to aggregate that traffic for transport over higher bandwidth interoffice facilities to NorthPoint’s node, or to its ISP-customer locations. DSLAMs are thus directly related to NorthPoint’s ability to utilize the unbundled

⁸ *UNE Remand Order*, 15 FCC Rcd at 3721, ¶ 44 (emphasis in original).

⁹ *NPRM* at ¶ 10.

¹⁰ *NPRM* at ¶ 10.

¹¹ In addition to terminating copper loops and combining traffic from multiple loops onto one or more trunks, DSLAMs also “split voice (low band) and data (high band) signals carried over a copper twisted pair” and can forward voice channels to one or more circuit switches and can extract data units from data channels on copper loops. See *Ameritech Corp. and SBC Communications, Inc. for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(c) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95, and 101 of the Commission’s Rules*, Second Memorandum Opinion and Order, CC Docket No. 98-141, ASD File No. 99-49 at ¶ 11, n. 27 (rel. Sept. 8, 2000) (“*Project Pronto Order*”).

copper loops it obtains from the incumbent LEC, and are therefore “necessary” for purposes of Section 251(c)(6), 47 U.S.C. ¶ 251(c)(6).

Moreover, NorthPoint and other DSL competitive LECs also are entitled to collocate their DSLAMs in incumbent LEC offices under the standard on which the NPRM sought comment. As the Commission has recognized, higher-speed DSL services require a DSLAM to be placed within a reasonable distance of the customer’s premises, generally less than 18,000 feet.¹² Without the ability to collocate its DSLAMs on the incumbent LEC premises, NorthPoint would not be able to use the unbundled copper loops it obtains to provide advanced services.

2. Certain ATM Equipment is “Necessary” for Access to UNEs.

DSL carriers must be permitted to collocate certain ATM equipment on the incumbent LEC’s premises. More specifically, DSL carriers must be permitted to collocate ATM aggregation devices used to direct traffic to defined points within NorthPoint’s network. ATM aggregation devices are directly related to, and thus necessary to, access to unbundled network elements (principally loops and interoffice transport) purchased from the incumbent LECs.

The DSL service provided by NorthPoint is a private line service that connects end users to NorthPoint’s ISP customers.¹³ NorthPoint uses ATM aggregation devices to connect traffic from specific end users to their respective ISPs. The ATM device aggregates DSL traffic from one or more DSLAMs destined for a particular ISP, and then routes that traffic over interoffice transport facilities to NorthPoint’s ISP customers. Thus, ATM aggregation devices are directly

¹² *NPRM* at ¶ 10.

¹³ ATM aggregation devices are often called “ATM switches.” For purposes of NorthPoint’s use of this equipment, however, this term is a misnomer because, by definition, a private line service like DSL service does not involve “switching.” Thus, the Commission may impose a requirement on incumbent LECs to permit the collocation of this equipment without modifying its current policy that does not require the incumbent LECs to permit the collocation of switching equipment.

related to NorthPoint's ability to use the unbundled copper loops and interoffice transport it obtains from the incumbent LEC to offer advanced services, and are therefore "necessary" for purposes of Section 251(c)(6).

In addition, NorthPoint is entitled to collocate ATM devices in incumbent LEC central offices under the standard on which the FCC sought comment in the NPRM. Absent the ability to collocate such equipment, NorthPoint's cost and complexity of providing advanced services would increase significantly, creating an effective barrier to NorthPoint's ability to provide service. If NorthPoint were required to deploy all of its ATM devices outside of the incumbents' offices, it would be forced to obtain transport (thereby incurring additional costs) from those central offices (the "serving wire centers") to the ATM equipment, which would be installed in commercial collocation space. In NorthPoint's experience, this usually involves the lease of special access circuits, not network elements, because incumbents typically contend that they do not have existing high-speed transport lines between the serving wire center and the commercial collocation space. These additional transport links between the serving wire center and the commercial collocation space not only substantially raise the cost of NorthPoint's service, but also increase the risk of service problems.¹⁴ For example, in the New York metropolitan area, the cost per DS-3 channel termination is approximately \$1000 per month, and NorthPoint has over 150 DS-3 circuits, representing a cost difference of \$150,000 per month. This represents a significant percentage of NorthPoint's transport costs in the New York area, which are approximately \$450,000 per month.

¹⁴ The fewer transport links used in NorthPoint's DSL service, the fewer opportunities there are for transport circuit failures. Consequently, NorthPoint's inability to collocate aggregation devices will, as a practical matter, significantly affect NorthPoint's ability to meet the exacting service levels and other performance requirements demanded by its ISP customers.

An incumbent LEC, by contrast, will be able to aggregate and route traffic in a direct and efficient manner between central offices and its ATM aggregation devices, and between its aggregation devices and its ISP customers (affiliated or not). Hence, its costs of providing DSL service will be significantly lower than the costs of a competitor forced to purchase unnecessary transport services. As an economic matter, the cost of employing substantial additional transport would preclude NorthPoint from offering its services because the incumbent will face a significantly lower cost structure.

NorthPoint's inability to collocate ATM aggregation devices also increases provisioning delays. As stated above, the incumbent LEC often does not provide unbundled transport between commercial collocation space and a serving wire center. NorthPoint, as a result, cannot begin offering service in the affected serving wire centers until the incumbent completes construction of the new transport facilities.

III. INCUMBENT LECS MUST ALLOW CARRIERS TO ESTABLISH CROSS-CONNECTS BETWEEN COLLOCATED EQUIPMENT

A. The D.C. Circuit's Opinion Did Not Disturb The Commission's 1996 Rule Requiring Incumbent LECs To Provide Cross-Connects Between The Equipment Of Collocated Carriers.

In the 1996 *Local Competition Order*, the Commission concluded that prohibiting carriers from interconnecting their collocated equipment would unduly burden competitive carriers by requiring them to route transmission facilities outside of the incumbent LEC's premises in order to interconnect with each other.¹⁵ At the same time, the Commission recognized that requiring incumbent LECs to allow interconnection of collocated equipment

¹⁵ *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, CC Docket 96-98, 11 FCC Rcd 15,499, 15801-2 (1996) ("Local Competition Order") (¶ 594).

would “foster competition by promoting efficient operation.”¹⁶ The Commission therefore required incumbent LECs to permit “competing carriers to establish cross-connects to the collocated equipment of other competing carriers at the incumbent’s premises,” provided that “the collocated equipment is used for interconnection with the incumbent LEC or access to the LEC’s unbundled network elements.”¹⁷ The Commission did not, however, require the incumbent LECs to permit competitive LECs to construct their own connecting transmission facilities.¹⁸

In the *Collocation Order*, the Commission revisited its cross-connect rules, adding a requirement that incumbent LECs permit collocating carriers to construct their own cross-connect facilities.¹⁹ According to the Commission, there was “no reason” for the incumbent LEC to refuse to allow competitors to provide their own cross-connects, “subject only to the same reasonable safety requirements the incumbent places on its own similar facilities.”²⁰ The Commission ruled that incumbent LECs could not require competitors to purchase equipment or cross-connect facilities solely from the incumbent LEC.²¹

¹⁶ *Id.*

¹⁷ *Id.* The Commission found authority for this requirement in section 251(c)(6)’s mandate that collocation be provided on “terms and conditions that are just, reasonable, and nondiscriminatory,” as well as in section 4(i) (47 USC § 154(i)). In reaching this conclusion, the Commission correctly recognized that “[t]o the extent equipment is collocated for the purposes expressly permitted under section 251(c)(6), the statute does not bar us from requiring that incumbent LECs allow connection of such equipment to other collocating carriers located nearby.” *Id.*

¹⁸ The Commission required incumbent LECs to provide the connection between the carriers’ collocation spaces, unless the incumbent LEC permitted the collocating parties to provide this connection for themselves. *Id.* at ¶ 595.

¹⁹ See 47 C.F.R. § 51.323(h)(2).

²⁰ *Collocation Order*, 14 FCC Rcd at 4779-80, ¶ 33.

²¹ *Id.*

In its review of the *Collocation Order*, the court vacated only “the offending portions of the Collocation Order,” and thus, only the Commission’s *additional* cross-connect rules.²² The court did not address the original cross-connect rule from the 1996 *Local Competition Order*, requiring incumbent LECs to provide cross-connects.²³ Nor did the court question the Commission’s finding in the *Local Competition Order* that it could require incumbent LECs to provide cross-connects pursuant to the mandate of section 251(c)(6) that collocation be provided on “terms and conditions that are just, reasonable, and nondiscriminatory.”²⁴ In short, the court’s decision in *GTE* did not disturb the Commission’s original rule requiring incumbent LECs to provide cross-connects. Even if the court’s decision had effectively vacated all of the Commission’s prior cross-connect rules, the Commission could still reinstate or revise those rules, provided that it explains its actions.

B. Cross-Connects Between Collocated Equipment are Part of the Terms and Conditions of Collocation, and must be Provided in a Manner that is Just, Reasonable and Nondiscriminatory.

In deciding *GTE*, the D.C. Circuit viewed cross-connects as equipment, and therefore assumed that incumbent LECs must provide them only if they are “necessary” for interconnection or access to UNEs.²⁵ A cross-connect is *not* a separate piece of equipment, however. Rather, a cross-connect is a method of connecting essential components of loops, transport, and office equipment in a collocation arrangement that allows a carrier to make effective use of these network elements and its collocated equipment. Just as the right to

²² *GTE*, 205 F.3d at 424.

²³ *Id.* at 423 (citing only the *Collocation Order*, with a particular focus on the Commission’s claim that it sees “no reason” to refuse to permit collocating carriers to interconnect with each other).

²⁴ *Local Competition Order*, 11 FCC Rcd at 15801-2, ¶ 594.

²⁵ See *GTE*, 205 F.3d at 423 (criticizing the Commission for failure to show that cross-connects are “necessary” for interconnection or access to UNEs).

collocate a multiplexer is useless without the accompanying right to connect that multiplexer to a power source, so too the right to collocate a DSLAM is meaningless without the ability to connect that DSLAM to loops, transport facilities or other collocated equipment.

A careful reading of the Commission's orders demonstrates that it recognizes "cross-connects" as a term or condition of collocation. For example, in the 1996 *Local Competition Order*, the Commission applied the "just, reasonable, and nondiscriminatory" standard applicable to the rates, terms and conditions of collocation²⁶ – rather than the "necessary" standard which applies to collocated equipment – in concluding that incumbent LECs must provide cross-connects to collocated carriers.²⁷ The Commission's view that cross-connects are "terms and conditions" of collocation rather than equipment is also evident in the structure of the *Local Competition Order*, in which cross-connects are discussed in a section separate from the discussion of equipment issues.²⁸ While this view was implicit in the Commission's *Local Competition Order*, in light of the *GTE* decision, the Commission should clarify that cross-connects are properly categorized as "terms and conditions" of collocation, and must be provided in a just, reasonable and nondiscriminatory manner.

1. It would be unjust, unreasonable and discriminatory to deny carriers the right to cross-connect their collocated equipment.

Once equipment such as DSLAMs or ATM aggregation devices are found to be "necessary" within the meaning of section 251(c)(6), the statute requires incumbent LECs to provide physical collocation of such equipment on the same terms and conditions as the

²⁶ Incumbent LECs are required to provide physical collocation of "necessary" equipment on terms and conditions that are "just, reasonable, and nondiscriminatory." 47 U.S.C. § 251(c)(6).

²⁷ See *Local Competition Order*, 11 FCC Rcd at 15801-2, ¶ 594; see also *UNE Remand Order*, 15 FCC Rcd at 3778, ¶ 179 (defining a cross-connect as "a means of interconnection with a network element.")

²⁸ *Local Competition Order*, 11 FCC Rcd at 15792-96, ¶¶ 576-82 (discussing collocation of equipment) and at 15800-02, ¶¶ 592-595 (discussing cross-connects).

incumbent LEC imposes on itself or other carriers.²⁹ Thus, to the extent the incumbent LEC uses cross-connects to facilitate its own access to loops, or other network elements, it would be discriminatory for the incumbent LEC to refuse to provide cross-connects to collocated competitors. Denying competitive LECs access to such cross-connects would contravene the purpose of the nondiscrimination requirement by preventing carriers from utilizing the UNEs they purchase from the incumbent LEC as effectively as the incumbent is able to use those elements.

It would also be unjust and unreasonable for an incumbent LEC to deny competitive LECs cross-connects between their own collocation spaces or between their collocation spaces and a competitive transport provider (“CTP”). NorthPoint uses incumbent LEC-provided cross-connects to interconnect its collocated equipment in central offices to interoffice transport facilities provided either by the incumbent LEC or a CTP. Interconnecting its DSLAMs to unbundled loops would be useless to NorthPoint if it could not transport the traffic to its ISP partners. Indeed, in some central offices, the incumbent LEC does not provide sufficient interoffice transport to connect NorthPoint’s collocation equipment to its nodes. Without the ability to cross-connect its collocated equipment to a CTP in those offices, NorthPoint would not be able to serve ISPs with end user customers whose loops terminate in those offices.³⁰

²⁹ 47 U.S.C. § 251(c)(6) (requiring incumbent LECs to provide physical collocation on rates, terms and conditions that are just, reasonable and nondiscriminatory); *Local Competition Order*, 11 FCC Rcd at 15612, 15658 (¶¶ 218; 312) (“We believe that the term ‘nondiscriminatory’ as used throughout section 251, applies to the terms and conditions an incumbent LEC imposes on third parties as well as on itself.”)

³⁰ It bears emphasis that the Telecommunications Act of 1996 (“1996 Act”) built upon the Commission’s efforts to introduce facilities-based competition for exchange access service. In its *Expanded Interconnection* rulemaking proceeding, the Commission authorized the collocation (physical, subject to space availability, and subsequently virtual) of equipment needed by CTPs to offer competition for the incumbent LEC’s access transport services. *In the Matter of Expanded Interconnection with Local Telephone Company Facilities and Amendment of the part 69 Allocation of General Support Facility Costs*, Report and Order and Notice of Proposed Rulemaking, CC Dockets 91-141 and 92-222, 7 FCC Rcd 7369, 7390 (1992) (“*Expanded*

NorthPoint's business would be encumbered by the successes or failures of the incumbent LEC's planning department.

NorthPoint also uses incumbent LEC-provided cross-connects in central offices to interconnect separate (non-contiguous) NorthPoint collocation spaces in the same central office. Cross-connects enable NorthPoint to aggregate the traffic from the loops terminating at separate collocated equipment for transport outside of the central office. Without cross-connects, NorthPoint would be forced to purchase separate transport facilities (DS3s) for each DSLAM to carry traffic outside the central office. Denying NorthPoint cross-connects would therefore increase its interoffice transport costs two- or three-fold in certain central offices, putting it at a competitive disadvantage relative to the incumbent LEC, which is able to aggregate its traffic for efficient delivery over interoffice transport. Therefore, the Commission should continue to require incumbent LECs to provide each competitor with cross-connects to interconnect its own equipment with itself or another carrier, pursuant to the incumbent LEC's obligations under section 251(c)(6).

2. It would be unjust and unreasonable to deny competitive LECs the right to provide their own cross-connects.

Competitive LECs should have the option of cross-connecting their equipment in the most cost effective manner – either using the incumbent LEC, or using the competitive LECs' own equipment and personnel. It would be unjust and unreasonable for incumbent LECs to deny competitive LECs the right to provide their own cross-connects, subject to restrictions based on

Interconnection Order”). Under that regime, incumbent LECs were obligated to cross-connect the transport termination facilities of CTPs with the loops and special access facilities of their end user customers. Indeed, the legislative history of the House bill that was referred to the conference committee that produced the 1996 Act expressly stated that the requirement that incumbent LECs provide physical collocation space for competing providers was intended to overturn a 1994 appellate court decision that held the Commission lacked such authority under the Communications Act of 1934. House Rpt. 104-204, Part I, Communications Act of 1995 (July 24, 1995).

legitimate security and safety concerns. Allowing for legitimate security and safety restrictions addresses incumbent LEC concerns about network security. Once these concerns have been addressed there appears to be no legitimate reason for an incumbent LEC to deny a competitor the ability to configure its network efficiently, by providing its own cross-connects. In addition, permitting competitive LECs to provide their own cross-connects would also reduce the demands on incumbent LEC resources and facilities by making it easier for competitive LECs to access alternative sources of interoffice transportation.

C. The Commission Should Declare Cross-Connects Between Collocated Equipment to be Network Elements that must be Unbundled.

In addition to clarifying that cross-connects are “terms and conditions” of collocation, the Commission should recognize that cross-connects are network elements that must be provided on an unbundled basis at any technically feasible point and at cost-based rates pursuant to 251(c)(3) and 251(d)(2).³¹ The 1996 Act defines a network element as “a facility or equipment used in the provision of a telecommunications service.”³² The Commission has indicated that network elements also should be “physically connected to the incumbent’s network and . . . easily called

³¹ The fact that incumbent LECs are required to furnish cross-connects as part of their collocation obligations under 251(c)(6) does not preclude the Commission from finding that cross-connects are also a network element. For example, incumbent LECs are required under 251(c)(3) to make access to the operations support systems (“OSS”) associated with various network elements available on a nondiscriminatory basis and also to make access to their OSS available as an unbundled network element. Similarly, the Commission has also treated two-way trunking as a term or condition of interconnection, while also recognizing that transport trunks are network elements. *Local Competition Order*, 11 FCC Rcd at 15612-3, ¶ 219 (concluding that “if two-way trunking is technically feasible it would not be just, reasonable, and nondiscriminatory for the incumbent LEC to refuse to provide it.”); *Id.* at 15633, ¶ 262 (concluding that the definition of “network element” includes transport trunks).

³² 47 U.S.C. § 153(29).

into service.”³³ As explained below, cross-connects clearly meet the definition of a network element, as well as the unbundling standard established in the *UNE Remand Order*.

1. Cross-connects are network elements.

A cross-connect is a means of interconnecting various equipment or facilities. This interconnection is usually accomplished through the use of a digital system cross-connect frame (“DSX”), which permits cross-connections by patch cords and plugs.³⁴ The DSX is clearly a “facility or equipment used in the provision of a telecommunications service,” and therefore qualifies as a network element under the Communications Act.³⁵ The connections to and from the DSX are also part of the network element, which includes not only the equipment or facilities themselves, but also the

features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service.³⁶

Incumbents use DSX panels to interconnect with the equipment and facilities of other carriers, meaning that the DSX already is “physically connected to the incumbent’s network.”³⁷

³³ *UNE Remand Order*, 15 FCC Rcd at 3845, ¶ 328.

³⁴ Harry Newton, Newton’s Telecom Dictionary at 283 (16th ed. 2000) (*Newton’s*). A DSX is a manual bay or panel to which T-1 lines and DS1 circuit packs are wired. *Id.* Cross-connects can also be accomplished using a digital access and cross-connect system (“DACS”) -- a digital switching device for routing and switching T-1 lines, and DS-0 portions of lines, among multiple T-1 ports.” *Id.* at 233.

³⁵ 47 U.S.C. § 153(29).

³⁶ *Id.*

³⁷ *UNE Remand Order*, 15 FCC Rcd at 3845, ¶ 328. It is worth noting that network elements need not be part of the physical facilities and equipment used to provide local phone service. *AT&T v. Iowa Utils. Bd.*, 119 S. Ct. 721 at 367 (1999) (“it is impossible to credit the incumbents’ argument that a ‘network element’ must be part of the physical facilities and equipment used to provide local phone service.”)

In addition, DSXs are “easily called into service,”³⁸ as demonstrated by the fact that incumbent LECs currently have tariffed offerings providing carriers with cross-connects (including cabling) to other collocated carriers, as well as to the incumbent LECs’ own non-contiguous equipment located within the same central office.³⁹

Thus, it is clear that cross-connects meet the definition of a network element, and that incumbent LECs are capable of providing these types of connections. Even if providing cross-connects required incumbent LECs to make some modifications to their existing facilities, however, the Commission has the authority to order those modifications.⁴⁰ In fact, the Commission has already stated that an incumbent LEC “must provide cross connect facilities between an unbundled loop and a requesting carrier’s collocated equipment,” and mandated that charges for cross-connects must be cost-based and meet the requirements of 252(d)(1) and 251(c)(3).⁴¹

2. Cross-connects must be offered on an unbundled basis at cost-based rates.

In deciding whether to require an incumbent LEC to provide unbundled access to a non-proprietary network element, such as the cross-connect, the Commission must consider whether

³⁸ *UNE Remand Order* at 3845, ¶ 328.

³⁹ See Bell Atlantic’s CLEC Handbook, Vol. 3, <http://www.bellatlantic.com/wholesale/html/handbooks/clec/volume_3/c3s4_4.htm> (describing Verizon’s dedicated transit service and dedicated cable support offerings which provide direct connections between competitive LECs’ collocation arrangements and between collocation arrangements of the same collocator). See also, e.g., Bell Atlantic Tel. Cos. FCC Tariff No. 1, 3rd Rev’d Page 959.7, at para. 19.6(H) (“fiber optic cross-connects are available . . . for connections between two collocation arrangements”).

⁴⁰ See *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 813, n. 33 (8th Cir. 1997) *aff’d in part, rev’d in part* AT&T v. *Iowa Utils. Bd.*, 119 S.Ct. 721 (1999) (endorsing Commission’s statement that ‘the obligations imposed by sections 251(c)(2) and (c)(3) include modifications to the incumbent LEC facilities to the extent necessary to accommodate interconnection or access to network elements’ and noting that even the incumbent LECs “appear to acknowledge that the [1996] Act requires some modification of their facilities.”); *Local Competition Order*, 11 FCC Rcd at 15602-3, ¶ 198.

⁴¹ *UNE Remand Order*, 15 FCC Rcd at 3777-8, ¶ 178.

failure to provide access to that element would “impair” the requesting carrier’s ability to provide the service that it seeks to offer.⁴² Failure to provide access to a non-proprietary element “impairs” a requesting carrier if “lack of access to that element materially diminishes a requesting carrier’s ability to provide the services it seeks to offer.”⁴³

Under this standard, NorthPoint’s ability to offer DSL service would be “impaired” if it were unable to obtain cross-connects between its collocated equipment and third-party interoffice transport facilities.⁴⁴ Without access to cross-connects, NorthPoint would be unable to use third-party interoffice transport facilities. As such, it would be completely reliant on the incumbent LEC’s transport network. Reliance on only one provider of transport would increase the amount of incumbent LEC transport mileage used by NorthPoint as well as other carriers, and in turn, would increase the chances of capacity depletion. Moreover, NorthPoint would be limited to the incumbent LEC’s transport architecture, which may be a less efficient method of reaching NorthPoint’s ISP’s customers because it is likely to involve greater distances and additional offices and equipment. These inefficiencies would, in turn, increase the likelihood of impaired service and service outages.

In addition to applying the impair standard, the Commission also may consider whether an unbundling obligation is likely to: (1) encourage competitive LECs to rapidly enter the local market and serve the greatest number of consumers; (2) advance the development of facilities-based competition by competitors, and encourage investment and innovation in new technologies and new services by both incumbent LECs and competitive LECs; (3) reduce regulation of UNEs

⁴² 47 U.S.C. § 251(d)(2)(B).

⁴³ *UNE Remand Order*, 15 FCC Rcd at 3725, ¶ 51.

⁴⁴ The fact that some carriers may choose to provide their own cross-connects in certain circumstances should not affect the Commission’s decision to require incumbents to provide cross-connects as a UNE. See, e.g., *UNE Remand Order*, 15 FCC Rcd at 3725-7, 3785, ¶¶ 53-55, 196.

as alternatives to the incumbent LECs' network elements become available in the future; (4) provide certainty in the marketplace that will allow new entrants and fledgling competitors to develop national and regional business plans and bring the benefits of competition to the greatest number of consumers; and (5) be administratively practical to apply.⁴⁵ All of these factors weigh in favor of a national rule that declares cross-connects an unbundled network element.

Without unbundled cross-connects, facilities-based DSL providers, such as NorthPoint will be unable to serve certain central offices, reducing the competitive choices available to consumers served by those offices. Similarly, competitors will be unlikely to use competitive transport if they cannot interconnect with CTPs within the incumbent LEC's central office. On the other hand, the availability of cross-connects will enable interconnection with CTPs, which will spur the development of alternative interoffice transport providers, and reduce the need for incumbent LEC-provided unbundled transport.⁴⁶

IV. INCUMBENT LECS MUST OFFER TO COLLOCATE EQUIPMENT IN THE MOST SUITABLE SPACE AVAILABLE WITHIN THE INCUMBENT LEC'S PREMISES WITHIN REASONABLE PROVISIONING INTERVALS

An incumbent LEC's assignment of space to a requesting carrier for physical collocation, as well as the manner in which a collocater accesses its physical collocation arrangement, involves the terms and conditions under which an incumbent LEC provides collocation. As discussed above, Section 251(c)(6) requires that those terms and conditions be "just, reasonable, and nondiscriminatory."⁴⁷

⁴⁵ *Id.* at 3714, ¶ 27.

⁴⁶ Once the competitive transport market matures, CTPs will provide meaningful competition, allowing for the deregulation of incumbent LEC-provided transport. *See Id.* at 3842, ¶ 321 (concluding that transport from non-incumbent LEC sources is not sufficiently available "to warrant exclusion of interoffice transport from an incumbent LEC's unbundling obligations at this time.")

⁴⁷ 47 U.S.C. § 251(c)(6).

The D.C. Circuit vacated the Commission's rule requiring incumbent LECs to give competitors the option of collocating equipment in any unused space within the incumbent LEC central office.⁴⁸ The D.C. Circuit also vacated the Commission's rules forbidding incumbent LECs from requiring competitors to collocate in a room or space separate from the incumbent LEC's own equipment or to use separate entrances to access their own equipment.⁴⁹ On remand, the Commission sought comment on the procedure by which collocation space is assigned, where within an incumbent LEC premises that space is located, and how the collocator accesses its assigned space.⁵⁰

Inability to obtain appropriate collocation space substantially undermines a competitive LEC's ability to provide service. NorthPoint, therefore, urges the Commission to adopt the physical collocation requirements discussed below. Additionally, to guarantee that incumbent LECs comply with their statutory obligation to provide collocation on terms and conditions that are just, reasonable and nondiscriminatory, NorthPoint urges the Commission to establish specific provisioning intervals for certain types of collocation and to adopt a national space reservation policy.

A. Safeguards Are Necessary To Ensure That Incumbent LECs Assign Space In A Just, Reasonable, And Nondiscriminatory Manner.

The specific location of a competitive carrier's assigned space within a central office is a term and condition of collocation that can affect that carrier's network architecture and design, as well as the cost and time needed for provisioning. If the Commission allows the incumbent LEC, rather than the requesting carrier, to select physical collocation space from the unused

⁴⁸ *GTE*, 205 F.3d at 417.

⁴⁹ *Id.*

⁵⁰ *NPRM* at ¶ 95.

space in an incumbent LEC central office, the Commission should also adopt safeguards to ensure that the incumbent LEC assigns collocation space in a just, reasonable, and nondiscriminatory manner, as required by the statute.

First, the Commission should require incumbent LECs, subject to technical limitations and space availability, to assign a requesting carrier physical collocation space that is contiguous to the carrier's existing collocation arrangement. Assigning a requesting carrier contiguous collocation space fosters facilities-based competition by allowing the carrier to provision its physical collocation arrangements in the most effective manner. If a carrier requests additional collocation space for an augment and is assigned non-contiguous space, the carrier may be forced to install duplicate equipment and incur significant delay and expense.⁵¹ Essentially, the carrier will have to create a second collocation arrangement in the newly assigned space. The additional expense and delay impedes the provision of service by competing carriers and unnecessarily disadvantages these carriers relative to the incumbent LEC.

Second, the Commission should require incumbent LECs to provide requesting carriers collocation space within 300 feet from the MDF and 100 feet from the battery distribution frame ("BDFB"), where such space is available. If an incumbent LEC assigns a carrier space too far from the MDF, it may exceed the allowable distance that a DS3 signal can travel and meet ANSI standards without a regenerator. Once equipment is a certain distance from the MDF (usually around 300 feet), a carrier must install repeaters to boost signal strength and request additional cabling to reach the MDF, resulting in increased cost and provisioning intervals. Additional

⁵¹ For example, if assigned non-contiguous space, a carrier may have to install additional central office multiplexers, terminal servers, management hubs and metallic loop testers. Duplicate transport, management circuits, and cross-connects may also be necessary. Installation of this duplicative equipment could potentially increase a carrier's costs by \$20,000 and lengthen the provisioning interval by several months.

cabling, with its increased costs and technical complications, is also necessary if an incumbent LEC assigns a carrier physical collocation space more than 100 feet from the BDFB, which powers a carrier's equipment. Thus, the distance of a carrier's physical collocation arrangement from the MDF and the BDFB affects the carrier's ability to provide competitive service by increasing cost and the likelihood of technical difficulties.

B. Competitive LECs Should Not Bear the Burden of an Incumbent LEC's Choice to Isolate Competitive LEC Collocation Arrangements or to Require Competitive LECs to Use Separate Entrances.

If the Commission allows incumbent LECs to assign requesting carriers physical collocation space that is isolated or separate from incumbent LEC equipment, the incumbent LEC, not the requesting carrier, should pay for any walls, buffers, or other separation structures. Similarly, if the Commission allows an incumbent LEC to require collocators to use separate entrances to access collocated equipment, the incumbent LEC should be required to construct and pay for any new entrances.

Walls, buffers, isolated spaces or use of a separate entrance are not necessary to protect incumbent LEC equipment. Equally efficient, but less time-consuming and expensive security arrangements are available to incumbent LECs. As the Commission noted previously, incumbent LECs may protect their equipment by installing security cameras or other monitoring systems or requiring competitive LEC personnel to use badges with computerized tracking systems.⁵² Moreover, assigning a carrier isolated space or requiring use of separate entrances may benefit the incumbent LEC, but it does not benefit, and may actually harm, the requesting carrier because construction of a wall, buffer or separate entrance often lengthens collocation intervals. Additionally, construction of a wall or buffer could result in a carrier being assigned

⁵² *Collocation Order*, 14 FCC Rcd at 4788, ¶ 48.

space at some distance from the carrier's existing collocation arrangement, the MDF, or the BDFB, which, as discussed above, can adversely affect a competitor's ability to offer services.

C. The Commission Should Establish Reasonable Provisioning Intervals for Cageless Collocation and Augments.

To ensure that incumbent LECs comply with their statutory obligation to provide collocation on terms and conditions that are just and reasonable, NorthPoint urges the Commission to specify shorter provisioning intervals for particular collocation arrangements. Specifically, the Commission should require incumbent LECs to provision cageless collocation and augments to existing collocation arrangements within 45 calendar days of receiving an application. Like the 90-calendar-day interval recently adopted by the Commission for all types of collocation,⁵³ these shorter intervals should apply to the extent a state does not set its own standard and a requesting carrier and the incumbent LEC have not agreed to an alternative standard.

Shorter provisioning intervals for cageless collocation and augments are justified because incumbent LECs only complete a subset of the activities required to complete arrangements for traditional caged collocation. For example, before completing a caged collocation arrangement, the incumbent LEC must condition the floor space, plan the cage footprint, build the cage, and install cable trays to support the cages. By contrast, cageless collocation arrangements merely require incumbent LECs to condition floor space (significantly less than is needed for a caged arrangement), plan space for racks, and install cable trays to support the racks. Additionally, although the type of activities required of an incumbent LEC for a collocation augment may

⁵³ *NPRM* at ¶ 27.

vary, typically, the incumbent LEC does not have to complete the initial activities described above for augments.

Indeed, certain incumbent LECs already provision cageless collocation or collocation augments within 45 calendar days. For example, as the Commission noted, Qwest has agreed to provide cageless collocation within 45 calendar days in virtually its entire region.⁵⁴ BellSouth, in response to a recent state commission order, must now complete augments to existing collocation arrangements within 45 calendar days in Florida.⁵⁵ To ensure that incumbent LECs do not unreasonably delay competitive LECs seeking collocation, the Commission should adopt a national 45-calendar-day interval for cageless collocation and augments.

D. The Commission Should Adopt A National Space Reservation Policy

The Commission has noted in the past that incumbent LECs “have the incentive and capability to impede competitive entry by minimizing the amount of space that is available for collocation by competitors.”⁵⁶ To prevent incumbent LECs from impeding competition and to guarantee that incumbent LECs offer reasonable and nondiscriminatory collocation, the Commission should adopt a national space reservation policy that applies to states that have not established their own space reservation policy.

NorthPoint recommends that the Commission require incumbent LECs to allow competitive LECs to reserve space in incumbent LEC central offices up to eighteen months in

⁵⁴ *Id.* at ¶ 18.

⁵⁵ See *Petition of Competitive Carriers for Commission action to support local competition in BellSouth Telecommunications, Inc.'s service territory; Petition of ACI Corp., d/b/a Accelerated Connections, Inc. for generic investigation to ensure that BellSouth Telecommunications, Inc., Sprint-Florida, Incorporated, and GTE Florida Incorporated comply with obligation to provide alternative local exchange carriers with flexible, timely, and cost-efficient physical collocation*, Docket Nos. 981834-TP, 990321-TP, Order No. PSC-00-0941-FOF-TP, issued May 11, 2000.

⁵⁶ *Local Competition Order*, 11 FCC Rcd at 15797-8, ¶ 585.

advance. An adequate space reservation period is necessary to provide competitive LECs with enough lead time for network planning. In addition, for the reasons stated above, a competitive LEC should be able to reserve space within a certain central office based on proximity to its existing collocation arrangement, the MDF, or the BDFB.

Finally, in cases of pending exhaustion, the Commission should clarify that it would be discriminatory for an incumbent LEC to reclaim unused space from competitive LECs at a faster rate than it reclaims its own unused space. Incumbent LECs currently have an incentive to reclaim space from competitive LECs while preserving their own unused space within the central office. This practice of reclaiming reserved space from competitive LECs without reclaiming space from the incumbent LEC is discriminatory in contravention of Section 251(c)(6).

V. INCUMBENT LECS MUST DEPLOY REMOTE “NEXT GENERATION” NETWORKS IN A PRO-COMPETITIVE MANNER

As the Commission has noted, some incumbent LECs are upgrading or planning to upgrade their networks by installing fiber transmission facilities, remote terminals, and advanced electronics in the loop facility.⁵⁷ Because the deployment of these “next generation” networks may pose a threat to the continued emergence of facilities-based competition for advanced service, NorthPoint urges the Commission to adopt requirements to ensure that incumbent LECs retain and maintain existing copper plant between its central offices and end-user premises, provide adequate space for DSL carriers to collocate their equipment in remote terminals, and make available to competitive LECs at pro-competitive prices all of the features and functions of the equipment that the incumbent LECs deploy in remote terminals to offer advanced services. None of these requirements suffices by itself to ensure effective, facilities-based competition for

⁵⁷ *NPRM* at ¶ 118.

advanced services. Rather, each relates to a distinct potential barrier to competition. The adoption of all three requirements will allow competitive LECs to compete in a wide range of market conditions.

At a minimum, the Commission should adopt rules consistent with the voluntary commitments made by SBC Communications, Inc. (“SBC”) regarding its network upgrade plan, “Project Pronto.” Any lessening of these minimum requirements would significantly weaken competition within the context of this new architecture. Moreover, additional safeguards, beyond these commitments, are necessary to truly ensure that deployment of “next generation” networks is accomplished in a manner that preserves robust, facilities-based competition for advanced services. NorthPoint therefore urges the Commission to adopt the requirements discussed below to ensure that “next generation” networks will enhance, not undermine, competition among advanced service providers.

A. Incumbent LECs Must Retain and Maintain Existing Copper Plant.

The proliferation of DSL services has enhanced the importance of the nation’s copper infrastructure to the development of facilities-based competition for advanced services. Because competitive LECs that provide DSL services require access to the installed copper plant, it is crucial that the Commission not allow incumbent LECs to retire copper loop plant in conjunction with their deployment of remote terminals. NorthPoint urges the Commission to go beyond SBC’s copper retention commitments⁵⁸ and require an incumbent LEC to retain and maintain

⁵⁸ SBC committed to: (1) refrain from retiring any copper pairs for one year; (2) refrain from retiring (over a three year period) more than 5% of the copper pairs terminated on the Main Distribution Frames of its central offices; (3) disclose its decision-making criteria for retiring any copper plant; (4) notify CLECs of its intent to retire any copper plant at least 180 days in advance; and (5) provide unaffiliated entities an opportunity to buy copper plant marked for

existing copper plant between its central offices and end-user premises for a period of five years after it commences service from a remote terminal. This restriction would permit facilities-based competition for advanced services to continue to develop and flourish for the next several years. Before the expiration of the five-year term, the Commission would have ample opportunity to assess the need to continue, modify or eliminate the restriction.

NorthPoint recommends that the Commission establish a waiver procedure in the event that during this five-year period an incumbent LEC seeks to remove copper plant from service. The Commission should require the incumbent LEC to notify all potentially affected competitive LECs of its planned retirement of copper plant via an easily detected announcement of the planned removal on the incumbent LEC web site. The incumbent LEC should post this notice at least six months before the planned removal of copper and should include a description of the relevant characteristics of the copper to be removed (e.g., age, gauge), a list of affected central offices, and a statement of whether spare copper will still be available on affected routes after the designated plant is retired. Competitive LECs would have 45 days to object to the planned retirement. If the parties could not resolve the dispute within 30 days thereafter through negotiations, either party could submit the dispute to the Commission's established procedures for accelerated complaint resolution. The Commission could then decide to grant or deny a waiver based on whether the proposed retirement would serve the public interest, giving particular weight to the retirement's impact on competition for advanced services in the affected areas. This simple procedure would not unduly burden either incumbent LECs or the

retirement at net book value or the highest competitive bid, whichever is higher. *Project Pronto Order* at ¶ 39.

Commission and would provide reasonable protection against the premature retirement of copper plant that competitive DSL LECs need to offer their services.

B. Competitors Must Be Permitted To Collocate At Remote Terminals

Like access to copper plant, access to collocation space in remote terminals is essential for facilities-based competition to develop and thrive. This access will be jeopardized, however, if incumbent LECs retain discretion to deploy architectures that deliberately preclude or hamper competition. NorthPoint urges the Commission to adopt adequate safeguards to ensure that competitive LECs are able to deploy their own equipment at remote terminals.

NorthPoint suggests that the Commission require incumbent LECs to design all future remote terminals to accommodate at least three to five collocators.⁵⁹ Such a requirement would not only preserve collocation options but would also ensure that competitive LECs are able to collocate as efficiently as possible. By requiring incumbent LECs to design remote terminals that are amenable to reasonable physical collocation in the first place, the Commission will obviate the need, at some later date, for incumbent LECs and competitors to spend time and money retrofitting cramped terminals that have already been deployed.

Additionally, the Commission should clarify that incumbent LECs may not require carriers to interconnect with a copper subloop at a splice point outside the remote terminal.⁶⁰ Next generation architectures should not require splicing to take place outside the remote terminal. Since the remote terminal is a “technically feasible point” where a competitive LEC can interconnect with the copper subloop,⁶¹ incumbent LECs are already obligated under the

⁵⁹ SBC agreed to allocate 20% of the space available in all huts and controlled environmental vaults (“CEVs”) and 15% of space available in all cabinets installed after September 15, 2000 for use by unaffiliated carriers. *Project Pronto Order* at ¶ 34.

⁶⁰ See *NPRM*, at ¶ 133.

⁶¹ See 47 U.S.C. § 251(c)(2)(B).

Commission's rules to make access to a copper subloop available "at" the remote terminal – and not outside it.⁶² The Commission should clarify that, even though incumbent LECs may offer carriers the *option* of interconnecting with a copper subloop at a splice point outside the remote terminal, they may not require carriers to forego their existing right to interconnect at a splice point located within the remote terminal. To the extent that an incumbent LEC maintains that access to the subloop is only available at the engineered splice point outside the remote terminal, the incumbent LEC must make available the copper between the splice point and the competitor's collocation at the remote terminal as part of the subloop, and therefore, at no additional cost.

Finally, to facilitate efficient competitive LEC remote terminal collocation, NorthPoint urges the Commission to require incumbent LECs to provide competitive LECs with information on the boundaries of the area served by a particular remote terminal.

C. Incumbent LECs Must Provide Access to all the Features, Functions, and Capabilities of Their Advanced Services Equipment.

To compete on a level playing field with incumbent LECs, competitors need access to the full array of features, functions, and capabilities of the advanced service equipment that incumbent LECs place in their remote terminals. If an incumbent LEC were able to limit access only to those features that it or an affiliate was currently using in its own service, competitors would not be able to offer differentiated services by exploiting those features that the incumbent LEC or affiliate was not using. Without the ability to differentiate their services, competitors would not be able truly to compete, and consumers would be left with only one choice of product.

⁶² See 47 C.F.R. § 51.319(a)(2); *UNE Remand Order*, 15 FCC Rcd at 3838-9, ¶ 313.

To avoid this outcome, the Commission should require incumbent LECs to make available all of the features, functions, and capabilities of the advanced services equipment they install at remote terminals, recognizing that the features, functions, and capabilities may change over time as the incumbent LEC upgrades equipment or installs new equipment. An incumbent LEC should not be able to deny access to a particular capability simply because it is not using that capability. In particular, an incumbent LEC should be required to make available all quality of service (“QoS”) classes -- such as Constant Bit Rate and real time and non-real time Variable Bit Rate -- that exist in the attached electronics. In addition, incumbent LECs should be required to make available the capability of providing multiple permanent virtual circuits.⁶³ As the Commission suggests, such access will foster product differentiation.⁶⁴

In order to promote facilities-based competition, while ensuring competitors’ uses of the functionalities of remote equipment does not threaten network integrity, the Commission should establish a presumption, as it did in the *Project Pronto Order*,⁶⁵ that all features, functions, and capabilities made available by the manufacturer are technically and operationally feasible. Incumbent LECs would have the opportunity to demonstrate that a competitor’s use of these capabilities is technically infeasible.

Moreover, to prevent incumbent LECs from slowing the rollout of competitive services by denying competitors’ requests as a matter of course, the Commission should also make an accelerated complaint process available for resolving any such denials. Although the

⁶³ See *Project Pronto Order* at ¶¶ 42-45.

⁶⁴ *NPRM* at n. 262 (also noting that “our unbundling rules for interoffice transmission network elements specify that transmission facilities include ‘all technically feasible capacity-related services, including, but not limited to, DS1, DS3 and [OC-n] levels.’ 47 C.F.R. § 51.319(d)(1)(i).”)

⁶⁵ *Project Pronto Order* at ¶ 44.

Commission determined in the *Project Pronto Order* proceeding that all features, functions, and capabilities would be presumed technically feasible, the commitments themselves arguably leave some discretion with SBC to determine which features it will make available, based on purported capacity concerns and other effects on SBC's network.⁶⁶ Competitors may only influence SBC's decision via a cumbersome, collaborative process. The Commission's accelerated complaint process should be available for resolving disputes regarding the effect of deployment of a given functionality on the incumbent LEC's network.

Additionally, as specified in the *Project Pronto Order*,⁶⁷ the Commission should require incumbent LECs to make available these features, functions, and capabilities at rates consistent with the pricing of unbundled network elements. Any alternative pricing requirement would run the risk of thwarting local competition.

⁶⁶ "The availability of existing features and functions is subject to . . . a determination by the SBC/Ameritech incumbent LECs...." *Project Pronto Order*, Appendix A § 4(a); "Deployment will be subject to a determination by the SBC/Ameritech incumbent LECs...." *Id.* at 4(b).

⁶⁷ *Project Pronto Order* at ¶ 25.

VI. CONCLUSION

For the reasons set forth above, the Commission should adopt collocation rules requiring incumbent LECs to permit competitive carriers to collocate DSLAMs, ATM aggregation devices, and other necessary equipment, and to establish cross-connects between collocated equipment. Competitors must also have the right to collocate their equipment in the most suitable space available within the incumbent LEC's central office. Finally, the Commission should adopt rules assuring that the deployment of next-generation network facilities does not compromise the ability of new entrants to provide high quality advanced telecommunications services at competitive prices.

RESPECTFULLY SUBMITTED,

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Dated: October 12, 2000

Certificate of Service

I, Kanika Johnson, do hereby certify that on this 12th day of October, 2000, I caused a copy of the foregoing Comments of NorthPoint Communications, Inc. to be served upon each of the parties listed on the attached Service List.

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